

# Whole Grains and the HealthierUS School Challenge

Child and Adult Nutrition Services  
South Dakota Department of Education

## Overview

- What are whole grains
- Counting grains
- Incorporating whole grains
- The HealthierUS School Challenge

## What are whole grains?

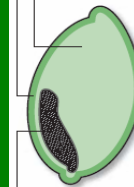


Amy Richards, MS, RD, LN

### Whole grain kernel

**Bran**  
"Outer shell" protects seed  
Fiber, B vitamins, trace minerals

**Endosperm**  
Provides energy  
Carbohydrates, protein



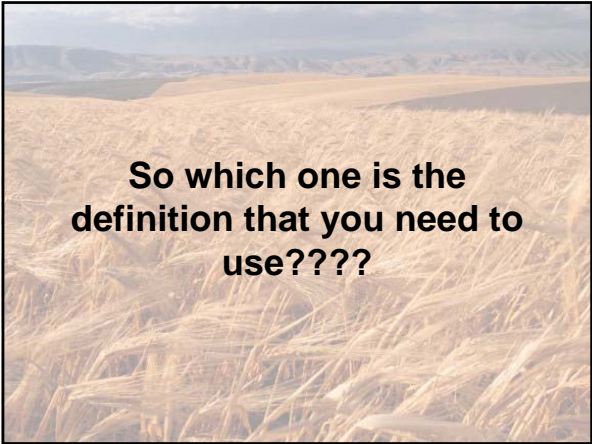
**Germ**  
Nourishment for the seed  
Antioxidants, vitamin E, B vitamins

## Industry derived definitions and labeling

- Whole Grain Council
  - Whole Grain Stamp: Excellent source, good source
- General Mills
  - Whole Grain statement on cereal boxes

## Government Derived Definitions

- FDA draft guidance for industry
- USDA guidance



**So which one is the definition that you need to use????**

## Summary Guidance from USDA

- Read the label
- First ingredient should be whole grain
- OR package should have whole-grain health claim
  - If it has the claim it must be 51% or more whole grain
- Call manufacturer if unsure

## Reading labels

A whole grain ingredient will often include the word whole, entire, cracked, crushed or groats

– Source: Food Buying Guide

## Reading Labels

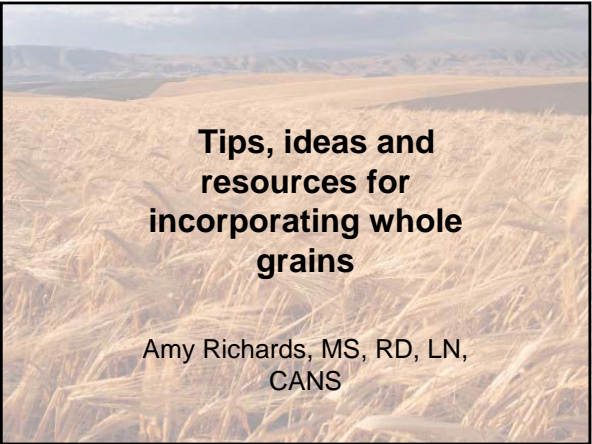
Let the buyer beware—creative marketing means that the wording can be misleading for whole grains

If in doubt, call the manufacturer



## Crediting Grains in Child Nutrition Programs

Jean Schuurmans, CANS



## Tips, ideas and resources for incorporating whole grains

Amy Richards, MS, RD, LN, CANS

### Ideas for incorporating whole grains

- Whole grain sandwiches or sandwiches with 1 slice whole wheat and 1 slice white bread
- Whole grain tortillas-- burritos, soft tacos, etc.
- Whole wheat hotdog and hamburger buns

### Ideas continued

- Whole grain bagels
- Whole grain pita bread
- Whole grain English muffins
- Whole grain pizza crust
- Whole grain muffins

### Ideas continued

- Serve more varieties of whole grain breakfast cereal
  - Hot cereals like oatmeal, cream of brown rice and 10 grain cereals
  - Cold cereals like Shredded wheat, Wheaties, Raisin Bran, and granola

### Ideas continued

- Use whole grains in salads such as bulgur in tabouli salad
- Put whole grains on the salad bar
  - Granola topping
  - Low fat whole grain crackers
  - Whole grain croutons
  - Whole grain pasta salads-such as bowtie, rigatoni, macaroni, etc.

### Ideas continued

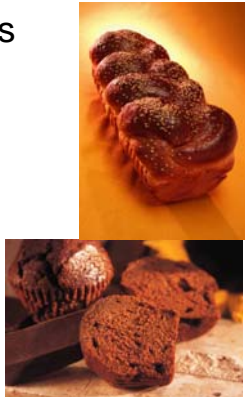
- Whole grain rice cakes
- Brown rice instead of white rice
- Whole grain pasta instead of regular pasta
  - Lasagna, Mac&cheese, pasta salad, spaghetti
- ½ brown rice or ½ whole grain pasta mix
- Use whole corn meal for corn muffins and corn bread

### Ideas continued

- Low fat whole grain crackers
- Whole grain cereal bars
- Unbuttered popcorn—(but not credible for CNP or HealthierUS School Challenge)
- Baked whole grain chips
- Whole grain cookies, cakes and desserts

### Baking tips

- If modifying a bread recipe-substitute whole grain flour gradually to get student acceptance until you reach 51 percent or more whole grain flour in the recipe



### Baking tips

**To substitute whole wheat flour for all of the white flour in a recipe—**

**Substitute cup for cup except subtract 1-tablespoon for every cup of flour that is being replaced.**

Source: Wheat Foods Council



### Baking tips

**For a lighter loaf of whole wheat bread**

Add 1-tablespoon liquid and 1-tablespoon gluten flour for every cup of whole wheat flour in the recipe.

Source: Wheat Foods Council



### Baking tips

**Substitute oatmeal for 1/3 of the flour in a recipe**

Source: Quaker Oats



### Tips for using whole grains

- Roast whole grains to bring out a nutty flavor before using in recipes
- Use ground whole grains instead of bread crumbs in recipes



### Tips for using whole grains

- Use whole grains or oatmeal in meatloaf
- Add wild rice, brown rice and barley to soup
- Add whole grain pasta to soup



## Tips for using whole grains

Try using brown rice in a stuffed green pepper recipe

Put wild rice, bulgur, or barley in bread stuffing

Be creative—put oatmeal in things like lemon poppy seed cake



## What has worked for you?



## ND Cooperative Extension Recipes

- North Dakota Cooperative Extension
  - 100% Whole Wheat Muffin Recipe
- <http://www.ext.nodak.edu/extnews/newsrelease/2005/090805/03prairi.htm>
  - Whole Wheat Sourdough Starter
- <http://www.ext.nodak.edu/extnews/newsrelease/2002/042502/03prairi.htm>
  - 100% Whole Wheat Chocolate Sheet Cake
- <http://www.ext.nodak.edu/extnews/newsrelease/2005/021005/03prairi.htm>

## Recipe sources

- A long list of various sites with recipes
  - <http://directory.google.com/Top/Home/Cooking/Grains/>
- Oatmeal recipes--Quaker Oats
- <http://www.quakeroatmeal.com/kitchen/recipes/index.cfm>
- Barley recipes—Barley Foods Council
- <http://www.barleyfoods.org/recipes.html>

## Tips for finding recipes on the Internet

University of Nebraska-Lancaster Cooperative Extension

–<http://lancaster.unl.edu/food/ciqj.htm>



## Websites with info about grains

- Clemson University Cooperative Extension
- <http://hgic.clemson.edu/factsheets/HGIC4019.htm>
- Wheat Foods Council
- <http://www.wheatfoods.org/Resource-Flourdifference/Index.htm>
- Whole Grain Council
- <http://www.wholegrainscouncil.org/WGAtoz.html>





**So what are  
others doing?**



**HealthierUS School  
Challenge**

**Kris Sands, RD, LN  
Jean Schuurmans,  
CANS**